FROM COCONUT WIRELESS TO THE GLOBAL KNOWLEDGE SOCIETY A CASE STUDY OF INTERNET DEVELOPMENT IN FIJI

Usha Sundar Harris
Macquarie University

ABSTRACT

Using the global knowledge society discourse, this paper explores the potential value of world wide web for community development and cultural participation in Pacific Island communities within a framework of participatory communication. The discussion begins with some ideas about knowledge itself, the differences between global knowledge and local knowledge, and the localisation of knowledge. It then presents a case study of internet development in Fiji to date: current technological condition, impediments and milestones and finally a discussion of its value to communities.

BACKGROUND

The globe has become increasingly interconnected through trade and technology yet small island nations in the Oceania remain isolated from this global network. Neither western academic research interest nor the multinational investment dollar, both of which have been preoccupied with globalisation in Asia and the West, have extended to this area of the Pacific. The island nations do not hold the same attraction for global media producers and infrastructure developers as have countries in Asia where favourable demographics and a burgeoning middle class with its devotion to consumer culture offer substantial returns on investment. With limited access to international bandwidth, dozens of island nations have fallen out of the globalisation loop. Ismet Hamiti, the regional coordinator for Asia at the ITU described the challenge facing these nations in the June 2001 issue of *Communications International*: "Fibre surrounds the Pacific Islands like spaghetti but it bypasses them. Because of the tiny market size there's no commercial justification for companies to land their cables. The Pacific may become bypassed by global infrastructure." (Raffray, 2001)

Pacific nations are amongst the last places on earth to have received television and internet access. The dispersed island communities together make up less than 0.01% of the world's population. In a global environment of commercialisation and consumerism how do small nation states with insignificant populations harness information and communication technologies (ICTs) for their own benefit?

Using the global knowledge society discourse, this paper explores the potential value of the world wide web for community development and cultural participation in Pacific Island communities. My PhD research focuses on the use of the internet for socio-cultural development within a framework of participatory communication in Fiji. As the project is in its early stages of development, I will speak on internet development in Fiji to date : current technological condition, impediments and milestones and finally its value to communities.

Before I proceed with my discussion of new communication technologies in Fiji, I would like to explore some ideas about knowledge itself, its worth to communities, the differences between global knowledge and local knowledge, and the localisation of knowledge.

It is not enough to simply assert that advances in technology have created an Information Age. Scholars such as Herbert Schiller, Theodore Roszak and Frank Webster have emphasized the importance of differentiating information on qualitative grounds. Roszak argues that too much has been made of "quantative measure of communicative exchanges" in the information society debate. (Webster, 2002: 11). In his discussion of

Roszak's critique of the information society, Webster points out:
His examination emphasizes the importance of qualitatively distinguishing information , extending to it what each of us does on an everyday basis when we differentiate between phenomena such as data, knowledge, experience, and wisdom. (Webster, 2002:11)

There is a difference between knowledge and information. While the former is situated within the realm of enlightenment and betterment of society and is transformative in nature, the latter is an accumulation of facts or data. Indeed one person's knowledge may be another's information. Information becomes knowledge when it makes qualitative difference to the lives of those engaged in its adoption. Does this information have value for me? Is it going to change me or my community in any meaningful way? In other words, it must have a development potential resulting in an improved quality of life. To use Nepalese Journalist Kunda Dixit's words: "… To be useful, information must help people communicate, participate and allow them and their rulers to make informed choices." (Dixit, 2000)

There is an urgent need in the global information debate to find a place for traditional knowledge within the hallowed halls of theoretical or empirical knowledge, and meaningful ways to inter-connect the two. Theoretical knowledge is one that has been empirically proven against a set of criteria. This information is tested, codified and then formalised in texts and transmitted to inform for better social planning or individual planning (Webster, 2002). Theoretical knowledge is patented in industrial societies and falls within intellectual property rights. This shifting of knowledge from the domain of public good to profit making has led to critical inequalities and is central to discussion about global knowledge societies in world forums such as the World Summit on the Information Society (WSIS):

> The privatisation of knowledge and information through copyright, patents and trademarks is ceasing to be an effective means of rewarding creative endeavour or encouraging innovation. Instead it is contributing to the growth of inequality and the exploitation of the poorest peoples and communities. (WSIS, 2003)
>
> Traditional knowledge on the other hand is accumulated wisdom inherited from one's ancestors and is passed down through knowledge guardians such as the medicine man, the priest or the village nurse. The transfer of this knowledge in many traditional societies also employs a code of practice. I'll share a story to give you an example of this.

During my recent visit to Fiji I had the opportunity to spend some time with my aunt in Suva. At her house I met an elderly Fijian woman, a village masseuse, who occasionally drops by for a 'talanoa' or chat when visiting from her village and gives my aunt a massage. At my aunt's suggestion I agreed to a massage as well. At the end of the session I offered to pay the lady some money. She smiled but refused to say how much was reasonable. I turned to my aunt for help. She explained to me that Mere would never nominate an amount because when the knowledge had been passed down to her, her grandmother had extracted a promise that she would never charge for it. So I could offer her a gift in the form of money or clothes but not pay her for her services as I would a physiotherapist.

Should these two types of knowledge be of equal value? How can we safeguard against the loss of traditional knowledge caused through the proliferation and adoption of theoretical knowledge? When outside knowledge comes dressed in high production values it may seem more important and more valuable to developing communities. Yet in the West, we have many examples of practitioners successfully incorporating elements of traditional knowledge into their own practices e.g. meditation, yoga, tai chi. How can indigenous societies be equally rewarded for the use of their knowledge in the global information economy? Traditional knowledge is worth its weight in gold depending on the society and the context in which it is utilised.

You may remember a story early this year (January 2003) that captured the interest of world media when the remote island of

Tikopia in the Solomon islands chain was battered by Cyclone Zoe. It was feared that hundreds of islanders might have perished following fierce winds exceeding 300 kilometres per hour and massive waves (Honimae, 2003). The radio link was down and there was no airstrip on the island – in other words it had no communication link to the outside world. So when the cyclone struck, we in the connected world assumed that the islanders' lack of knowledge about the advancing storm had surely led to their demise. When photographer, Geoff Mackley, landed on Tikopia by helicopter he found to his amazement that not even one inhabitant had died:

"The whole way there I thought I would see hundreds of dead and festering bodies, but instead we were just overwhelmed with people running toward the plane. Every single person was alive and there they were, standing in front of me." (Honimae, 2003)

Why had they survived against all odds? Because they had retained their traditional knowledge about reading weather patterns and found a safe haven in the mountains "along paths their ancestors have used for centuries during cyclones" (Honimae, 2003). Despite our sophisticated communication technology it was the developed world and its news media which was left in the dark and not the small community in the Pacific. They had no doubts about their own survival.

But what if they had the internet or a mobile phone. Would they have abandoned their own traditional knowledge in favour of theoretical knowledge or used it as a foundation on which to build a stronger knowledge base? In other words, would they have used the two together to further increase their chances of survival? Communities like this can employ new technologies to preserve their ancestral knowledge. Survivors can place their accumulated knowledge together with maps of the island, directions to the cave and water sources on the internet or CD ROM which can then be used by future generations for their own survival.

It is this application of local knowledge that holds the greatest promise for NCTs like the internet in the development of Pacific communities. Now I'll turn to Fiji as a case study of internet development.

INTERNET IN FIJI

As a developing nation with a multiracial population of more than 800,000, Fiji presents a challenge to most forms of media It is politically volatile, multi-lingual with widely divergent audiences in terms of culture, age, rural-urban divide and social observance. (51% Fijians, 43% Indians and 6% Part-Europeans, Rotumans and others)

The first use of internet in Fiji was at University of the South Pacific in the late 1980s and early 90s when it was used for intranet connection. As a result the domain name .fj is held by USP.

From 1996 Internet came into wider use when the first internet service provider, Internet Fiji, was set up by Telecom Fiji. The growth in the market has been slow with about 8,000 dial up subscribers in seven years. This represents a penetration rate of around one percent. Internet usage is mainly limited within Government and business sectors who were among the first to sign up as customers. Very few homes are connected to the internet and these are mainly in the urban centres. One positive area of growth has been the internet cafes which enjoy vigorous business from the youth population. In urban centres such as Suva and Nadi a large proportion of users are school children who either use it for emails or to research school projects.

CURRENT TECHNOLOGICAL CONDITION

Fiji enjoys a well developed infrastucture compared to its regional neighbours. Until recently the minimum infrastructure for computer-based internet connections required reliable electricity supply, reliable telecommunication lines, and network connectivity. With recent advances in wireless technology and integrated telecommunications networks the internet has been liberated from the shackles of wired communications making it more efficient and cost effective in developing nations (Caine, 2003). A quick look at the infrastructure development *in power point presentation:*

Electrification

62% of homes in Fiji.

Remote communities use generators.

Telephone connectivity

92,000 working phone lines - commercial + domestic.

40,000 homes are connected with fixed telephone lines

80,000 mobile phone customers.

8,000 internet connections - largely commercial users. 1% penetration rate.

IMPEDIMENTS

Major impediments to internet development in Fiji have been unequal telecom access between urban and rural population, prohibitive costs, monopolies and an ineffective regulatory framework (Caine,2003).

There are about 600 villages unconnected. The price of internet connections is inhibiting e.g. $44 for 15 hours of access per month. Compare this to the average annual income of around $3500 ($290 per month or $ 72 per week) With the post- coup economic woes and business closures many wage earners are paid far less than that.

Pricing is directly related to the telecom monopoly. Amalgamated Telecommunications Holdings has a monopoly on Fiji's telecommunications service until 2014. ATH structure is as follows: Telecom Fiji Ltd controls local telephony and Intel controls the international service. Telecom Fiji in turn controls the mobile phone (Vodaphone) and Directories Fiji Ltd. Although 18 ISP licences have been issued these do not represent competition as they rely on Telecom Fiji infrastructure which dictates pricing.

The Government is currently reviewing the regulatory framework in the following areas:

pricing

control

interconnectivity

access and call charges.

END OF SLIDE SHOW

Besides pricing, another factor that has inhibited internet growth in Fiji is lack of skill to use the technology and lack of an understanding of how it can enrich and enhance the broader community. Users predominantly use the internet for email communication. Slow connections mean that emails take time to download and as such messages do not elicit the same prompt reply in Fiji as it does in, say, Sydney. Policy makers are cognisant of the fact that computer illiteracy and lack of knowledge about the internet will hinder connectivity (Turaganivalu, 2003). In fact a study conducted a few years ago found that policy makers themselves don't use the technology. (video clip of Yashwant Gaunder as he talks about a study on internet usage amongst Fijian Parliamentarians)

MILESTONES

In 2000, Fiji was connected to the Southern Cross Cable allowing FINTEL to offer broadband service for the first time. The fibre optic cable connects Australia and New Zealand to the US mainland landing in Fiji and Hawaii. This has brought Fiji into the global information infrastructure which will make Fiji attractive to commercial investors in the area of IT service such as call centres and data processing zones (Purcell and Toland, 2003).

THE INTERNET COUP

The 2nd milestone for internet development in Fiji also occurred in 2000. The civilian coup on 19 May 2000 brought world-wide attention to a small web publisher, Fijilive.com, which provided the only communication link out of Suva during the critical first 48 hours of this crisis. The international telephone lines had been cut by the perpetrators in an attempt to paralyse communication with the rest of the world. Fijilive publisher, Yashwant Gaunder, a journalist by profession instantly recognised the power of the internet in maintaining the global communication flow. In an amazing example of reverse news flow the world's news media took direct feeds off Fijilive.com to inform international audiences about the events unravelling in Fiji's Parliamentary compounds. Gaunder himself was surprised

by the interest his website generated worldwide: (Yashwant Gaunder video clip. The Publisher of Fijilive recollects the events of 19 May 2000 and how his website became the central channel of information flow out of Fiji)

At the time of the coup there were about 100,000 former Fiji residents living in a number of the world's major centres. Numerous web sites sprang up representing diverse views and articulating the concerns of ex Fiji residents in Canada, the United States, Australia, New Zealand and the UK. Computer mediated communication in the form of emails, newsgroups, internet chat rooms and forum postings became central in facilitating a virtual community for dispersed Indo- Fijians who struggled to make sense of yet another coup. During the 1987 coup the Indo-Fijian diaspora relied on community media and social or religious groups to inform and organise political resistance. The May 2000 coup heralded a new form of engagement for a marginalised community which had experienced political exclusion once too often. As a member of this community I found myself in a web-storm of informational activity. Large amounts of information flowed - some profoundly insightful, some informative, some emotionally charged - to create a global support network. A cohesive and organised voice of political resistance emerged. The Indo-Fijian diaspora found a new identity online as a vocal politically engaged borderless community. Academics in Canberra and Suva, lawyers in Melbourne and London, whole families in suburbs of Sydney, Vancouver or Los Angeles used the world wide web for collective action to voice their concerns, petition their political representatives and demand justice on behalf of their countrymen in Fiji. More than anything the coup of May 2000 presented Fiji's dispersed diasporic communities with an invaluable channel of communication - a virtual community shelter - in a time of crisis and extreme anxiety.

There is no doubt that online communication and engagement can now be extended in post-coup Fiji for purposes of reconciliation. As a democratising force, the internet can be used by a socially fragmented community in rebuilding its identity through projects of social rehabilitation and healing. For this to happen local communities have to be encouraged to participate in meaningful local content production as an extension of other reconciliation projects.

One of the questions posed in this conference is how can people best learn the technology in a culturally appropriate and self-directed context.

My research focuses on this aspect of internet use - developing ways in which local communities can engage in local content development in a self-directed and culturally appropriate context with themes such as reconciliation and sustainable development underpinning their projects. Ultimately what gets produced must come from the hearts and minds of the communities themselves.

REFERENCES

Caine, Abel. 2003, *Country Report, Fiji.* Pacific Islands Regional ICT Consultation 9-11 April, 2003. Retrieved 8 September 2003 from www.undp.org.fj/documents/ICT4DEV/PIRC

Dixit,Kunda, *Exiled to Cyberia, A Third World View on the Knowledge Society*, D+C Development and Cooperation (No. 4, July/August 2000, p. 15) Retrieved March 3, 2003 from http://www.inwent.org/en

Gaunder, Yashwant. 2003. Personal Interview, Suva, Fiji

Honimae, Johnson. 2003. *Islanders tell how they survived Cyclone Zoe.* Retrieved September 24, 2003 from http://www.planetark.org/dailynewsstory.cfm/newsid/19292

Purcell, Fuatai and Toland, Janet. 2003, *Information and Communication Technologies in the South Pacific: Shrinking the Barrier of Distance*. Retrieved September 10, 2003 from http://www.fdc.org.au/files/toland-2.pdf

Raffray, Nathalie, "Islands in the Stream" in *Communications International,* June 2001, London: EMAP Business Publishing.

Turaganivalu, Joe. 2003, Personal Interview, Ministry of Communications, Suva, Fiji.

Webster, Frank. (2002) *Information Age Anthology. Part One: The Information and Communication Revolution. Chapter 4: What Information Society?* Retrieved October 17, 2002, from http://www.dodccrp.org/antch04.htm

Webster, Frank. (2002) Theories of the Information Society.2nd edition. Routledge: London.

WSIS-Civil Society Working Group on Content and Themes.2003. *Civil Society Priorities Document: (3 August 2003) Revised version released for consultation in preparation for PrepCom-3.*Retrieved September 10, 2003 from http://www.itu.int/wsis/documents